

## ABSTRACT OF THE DISCLOSURE

A semiconductor device includes a low resistance  
5 semiconductor substrate, a high resistance semiconductor  
layer formed on the substrate, an insulation layer formed on  
the semiconductor layer, and a transistor element composed of  
a collector region, a base region, and an emitter region formed  
in the semiconductor layer. The device further includes an  
10 emitter electrode formed in the insulation layer to be  
connected to the emitter region, a sub-emitter electrode  
formed in the insulation layer connected to the emitter  
electrode, a low resistance impurity-diffusion region formed  
in the semiconductor layer such that the sub-emitter electrode  
15 is connected to the substrate through the impurity-diffusion  
region, a base electrode formed in the insulation layer to be  
connected to the base region, and a base-bonding pad formed  
on the insulation layer to be connected to the base electrode.  
The base-bonding pad is placed on the insulation layer above  
20 the impurity-diffusion region to be at least partially  
encompassed with the impurity-diffusion region.